AIR QUALITY PERMIT

Issued To: Riverside Gravel & Trucking

612 Springtime Road

Reed Point, Montana 59069

Permit #3240-00

Complete Application Submitted: 01/23/03 Preliminary Determination Issued: 02/25/03

Department Decision Issued: 03/13/03

Permit Final: 03/29/03 AFS #777-3240

An air quality permit, with conditions, is hereby granted to Riverside Gravel & Trucking (Riverside), pursuant to Sections 75-2-204 and 211, Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.701, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

- A. Plant Location: Riverside operates a portable crushing/screening operation that will originally locate in the NW¼ of the SE¼ of Section 20, Township 2 South, Range 20 East, in Stillwater County, Montana. However, Permit #3240-00 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. An addendum to this air quality permit will be required for locations in or within 10 kilometers (km) of certain PM₁0 nonattainment areas.
- B. Permitted Equipment: Riverside operates a portable crushing/screening operation. A complete list of the permitted equipment can be found in Section I.A of permit analysis.

Section II: Limitations and Conditions

- A. Operational Limitations and Conditions
 - 1. Riverside shall not cause or authorize to be discharged into the atmosphere from any Standards of Performance for New Stationary Sources (NSPS) affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.715, and 40 CFR Part 60, Subpart OOO).
 - 2. Riverside shall not cause or authorize to be discharged into the atmosphere from any other NSPS affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.715, and 40 CFR 60, Subpart OOO).
 - 3. Riverside shall not cause or authorize to be discharged into the atmosphere, from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.715).
 - 4. Water and spray bars shall be available and used, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.715).

- 5. Riverside shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
- 6. Riverside shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.715).
- 7. Total crusher production for the facility shall be limited to 1,051,200 tons during any rolling 12-month time period (ARM 17.8.710).
- 8. Total screen production for the facility shall be limited to 5,256,000 tons during any rolling 12-month time period (ARM 17.8.710).
- 9. If the permitted equipment is used in conjunction with any other equipment owned or operated by Riverside, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.710).
- 10. Riverside shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO), as applicable.

B. Testing Requirements

- 1. Within 60 days after achieving the maximum production rate, but no later than 180 days after initial startup, an EPA Method 9 opacity test and/or other methods and procedures, as specified in 40 CFR Part 60.675, must be performed on any NSPS affected equipment to demonstrate compliance with the emissions limitations contained in Sections II.A.1 and II.A.2 (ARM 17.8.340, 40 CFR Part 60, General Provisions and Subpart OOO).
- 2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

- 1. If this crushing/screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.734).
- 2. Riverside shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by Riverside as a permanent business record for at least 5 years following the date of the measurement, shall be submitted to the Department upon request, and shall be available at the plant site for inspection by the Department (ARM 17.8.710).

- 3. Riverside shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of the permit analysis.
 - Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in units, as required by the Department (ARM 17.8.505).
- 4. Riverside shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.705(1)(r) that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change and must include the information requested in ARM 17.8.705(1)(r)(iv) (ARM 17.8.705).
- 5. Riverside shall document, by month, the total crusher production. By the 25th day of each month, Riverside shall total the crusher production during the previous 12 months to verify compliance with the limitation in Section II.A.7. A written report of the compliance verification shall be submitted along with the annual emission inventory (ARM 17.8.710).
- 6. Riverside shall document, by month, the total screen production. By the 25th day of each month, Riverside shall total the screen production during the previous 12 months to verify compliance with the limitation in Section II.A.8. A written report of the compliance verification shall be submitted along with the annual emission inventory (ARM 17.8.710).

Section III: General Conditions

- A. Inspection Riverside shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Riverside fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Riverside of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.701, *et seq.* (ARM 17.8.717).
- D. Enforcement Violations of limitations, conditions, and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.

- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing postpones the effective date of the Department decision until the conclusion of the hearing and issuance of a final decision by the Board. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section.
- F. Permit Inspection As required by ARM 17.8.716, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Construction Commencement Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.
- H. Permit Fees Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay by Riverside of an annual operation fee may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Riverside shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas having a Department approved permitting program.

PERMIT ANALYSIS Riverside Gravel & Trucking Permit Number 3240-00

I. Introduction/Process Description

A. Permitted Equipment

On January 23, 2003, Riverside Gravel & Trucking (Riverside) submitted a complete permit application to operate a portable crushing/screening facility consisting of a portable 1998 Gator (16'x24') Jaw Crusher (70 TPH), a 1994 Hazmag Impact Crusher (maximum capacity 50 TPH), a 1930 Cedar Rapids (3'x7') Screen (115 TPH), a 1999 Kolberg (4'x12') 2-deck screen (240 TPH), a 2001 Nordberg 3-deck Screen (160 TPH), a 1998 Armadillo (25') Sand Screen (100 TPH), a Diesel Engine 27 (HP), and associated equipment. The original location for the facility will be in the NW½ of the SE½ of Section 20, Township 2 South, Range 20 East, in Stillwater County, Montana. Permit #3240-00 will apply to the source while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program or those areas in or within 10 kilometers (km) of certain PM₁₀ (particulate matter with an aerodynamic diameter of 10 microns or less) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*.

B. Process Description

Riverside proposes to use this crushing/screening plant to crush and sort sand and gravel materials for use in various construction operations. For a typical operational setup, unprocessed materials are loaded into the crushing/screening plant by a hopper and transferred by conveyor to a screen. Materials are separated, with the smaller materials conveyed on to stockpile and the larger materials conveyed on to a jaw crusher for crushing. From the jaw crusher, materials are conveyed to a second screen, with the oversized materials conveyed to an impact crusher and the undersized materials conveyed on to a third screen. Undersized materials are either conveyed to a product pile or on to a sand auger washer, for washing, prior to transfer to stockpile.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
 - 1. <u>ARM 17.8.101 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment, including instruments and sensing devices, and shall conduct tests, emission or ambient, for such periods of time as may be necessary, using methods approved by the Department.

- 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).
 - Riverside shall comply with all requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.
- 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
- 5. <u>ARM 17.8.111 Circumvention</u>. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
 - 1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Riverside must comply with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. <u>ARM 17.8.308 Particulate Matter, Airborne.</u> (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Riverside shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 - 3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
 - 4. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires that

no person shall cause or allow to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.

- 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
- 6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
- 7. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, NSPS, shall comply with the standards and provisions of 40 CFR Part 60. In order for a crushing/screening plant to be subject to 40 CFR 60, Subpart OOO requirements, two specific criteria must be met. First, the crushing/screening plant must meet the definition of an affected facility and, second, the equipment in question must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Riverside, the crushing/screening equipment to be used with Permit #3240-00 may be subject to NSPS requirements (40 CFR Part 60, Subpart A General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants).
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that Riverside submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Riverside submitted the appropriate permit application fee as required for the current permit action.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees.</u> An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

E. ARM 17.8, Subchapter 7 - Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

- 1. <u>ARM 17.8.701 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
- 2. <u>ARM 17.8.704 General Procedures for Air Quality Pre-construction Permitting.</u> This air quality preconstruction permit contains requirements and conditions applicable to both construction and subsequent use of the permitted equipment.
- 3. <u>ARM 17.8.705 When Permit Required--Exclusions</u>. This rules requires a crushing/screening facility to obtain an air quality permit or permit alteration if they construct, alter or use any air contaminant sources that have the potential to emit greater than 15 tons per year of any pollutant. Riverside has the potential to emit more than 15 tons per year of total particulate matter (PM) and PM₁₀; therefore, a permit is required.
- 4. ARM 17.8.706 New or Altered Sources and Stacks--Permit Application
 Requirements. This rule requires that an application for an air quality permit be submitted prior to the installation, alteration, or use of a source. Riverside submitted the required permit application for the current permit action.
- 5. <u>ARM 17.8.707 Waivers</u>. ARM 17.8.706 requires the permit application be submitted 180 days before construction begins. This rule allows the Department to waive this time limit. The Department hereby waives this limit.
- 6. ARM 17.8.710 Conditions for Issuance of Permit. This rule requires that Riverside demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards as required for permit issuance. Riverside demonstrated compliance with all applicable rules and standards as required for permit issuance.
- 7. <u>ARM 17.8.715 Emission Control Requirements</u>. Riverside is required to install on the new or altered source the maximum air pollution control capability, which is technically practicable and economically feasible, except that Best Available Control Technology (BACT) shall be utilized. The required BACT analysis is included in Section IV of this permit analysis.
- 8. <u>ARM 17.8.716 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.717 Compliance with Other Statutes and Rules</u>. This rule states that nothing in this permit shall be construed as relieving Riverside of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.701, *et seq*.
- 10. ARM 17.8.720 Public Review of Permit Applications. This rule requires that Riverside notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Riverside submitted an affidavit of publication of public notice for the January 30, 2003, issue of the *Stillwater County News*, a newspaper of general circulation in the town of Red Lodge in Stillwater County, as proof of compliance with the public notice requirements.
- 11. <u>ARM 17.8.731 Duration of Permit</u>. An air quality permit shall be valid until revoked or modified as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition

providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

- 12. <u>ARM 17.8.733 Modification of Permit</u>. An air quality permit may be modified for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase in emissions because of the changed conditions of operation. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.
- 13. <u>ARM 17.8.734 Transfer of Permit</u>. (1) This rule states that an air quality permit may be transferred from one location to another if written notice of Intent to Transfer is sent to the Department. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Federal Clean Air Act (FCAA) that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since it is not a listed source and the facility's potential to emit is less than 250 tons per year of any air pollutant (excluding fugitive emissions).

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. Potential to Emit (PTE) > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or a lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of PM_{10} in a serious PM_{10} nonattainment area.
 - 2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3240-00 for the Riverside facility, the following conclusions

were made:

- a. The facility's PTE is less than 100 tons/year for any pollutant.
- b. The facility's PTE is less than 10 tons/year of any one HAP and less than 25 tons/year of all HAPs.
- c. This source is not located in a serious PM₁₀ nonattainment area.
- d. This facility is not subject to any current NESHAP standards.
- e. This facility may be subject to a current NSPS standard.
- f. This source is not a Title IV affected source nor a solid waste combustion unit
- g. This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that Riverside will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Riverside will be required to obtain a Title V Operating Permit.

III. Emission Inventory

			Tons/Year			
Source	PM	PM_{10}	NO_x	VOC	CO	SO_x
1998 Gator (16'x24') Jaw Crusher (70 TPH)	0.77	0.37				
1994 Hazmag Impact Crusher (50 TPH)	0.55	0.26				
1930 Cedar Rapids (3'x7') Screen (115 TPH)	7.93	3.78				
1999 Kolberg (4'x12') 2-deck Screen (240 TPH)	15.52	7.39				
2001 Nordberg 3-deck Screen (160 TPH)	11.04	5.26				
1998 Armadillo (25') Sand Screen (100 TPH)	6.90	3.29				
Material Transfer	35.72	17.25				
Pile Forming	16.56	7.88				
Bulk Loading	4.14	1.97				
Lister Diesel Motor (27 HP)	0.26	0.26	3.67	0.29	0.79	0.24
Haul Roads	2.74	1.23				
Total	102.13	48.94	3.67	0.29	0.79	0.24

 The maximum capacity of the largest screen was limited to reduce screen emissions, material transfer emissions, pile forming emissions, and bulk loading emissions below the Department modeling guidance threshold for PM₁₀ emissions for a facility. A complete emission inventory for Permit #3240-00 is on file with the Department.

IV. BACT Determination

A BACT determination is required for any new or altered source. Riverside shall install on the new or altered source the maximum air pollution control capability that is technologically practicable and economically feasible, except that BACT shall be used.

Riverside shall not cause or authorize to be discharged into the atmosphere from any NSPS effected crusher any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes. Riverside shall not cause to be discharged into the atmosphere from any other NSPS affected equipment, such as screens or conveyor transfers, any visible emissions that

exhibit an opacity of 10% or greater averaged over 6 consecutive minutes. Riverside shall not cause to be discharged into the atmosphere from any non-NSPS affected equipment any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. Riverside must also take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general plant property. Riverside is required to use water spray bars and water and/or chemical dust suppressant, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. The Department determined that using water spray bars and water and/or chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for these sources.

Because of the small amount of particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀), oxides of nitrogen (NO_x), volatile organic compounds (VOC), carbon monoxide (CO), and oxides of sulfur (SO_x) emissions produced by the diesel generator, add-on controls would be cost prohibitive. Thus, the Department determined that no additional control would constitute BACT for the generator. The control options selected have controls and control costs similar to other recently permitted similar sources and are capable of achieving the appropriate emissions standards.

V. Existing Air Quality

Permit #3240-00 is issued for the operation of a portable crushing/screening plant to be originally located in the NW¹/₄ of the SE¹/₄ of Section 20, Township 2 South, Range 20 East, in Stillwater County, Montana. This proposed site is not designated as a nonattainment area. Therefore, Permit #3240-00 will cover the operations at this site and no addendum is required.

VI. Ambient Air Quality Impact Analysis

Permit #3240-00 will cover the operation while operating at any location within Montana, excluding those counties that have a Department approved permitting program or those locations in or within 10 km of certain PM_{10} nonattainment areas (where a permit addendum is required in order to operate). In the view of the Department, the amount of controlled emissions generated by this facility will not exceed any set ambient standard. In addition, this source is portable and any air quality impacts will be minimal.

VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permitting and Compliance Division
Air and Waste Management Bureau
1520 East Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For: Riverside Gravel & Trucking

612 Springtime Road

Reed Point, Montana 59069

Permit Number: #3240-00

Preliminary Determination Issued: February 25, 2003

Department Decision Issued: March 13, 2003

Permit Final: March 29, 2003

- 1. Legal Description of Site: Riverside Gravel & Trucking (Riverside) submitted an application to operate a portable crushing/screening plant in the NW½ of the SE¼ of Section 20, Township 2 South, Range 20 East, in Stillwater County, Montana. Permit #3240-00 would also apply while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program or those areas in or within 10 km of certain PM₁₀ (particulate matter with an aerodynamic diameter of 10 microns or less) nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana.
- 2. Description of Project: The permit application proposes the construction and operation of a portable crushing/screening plant that would consist of a portable 1998 Gator Jaw crusher (70 TPH), a 1994 Hazmag Impact crusher (maximum capacity 50 TPH), a 1930 Cedar Rapids screen (115 TPH), a 1999 Kolberg 2-deck screen (240 TPH), a 2001 Nordberg 3-deck screen (160 TPH), a 1998 Armadillo (25') Sand Screen (100 TPH), a 27 HP diesel engine, and associated equipment. For a typical operational setup, unprocessed materials are loaded into the crushing/screening plant by a hopper and transferred by conveyor to a screen. Materials are separated, with the smaller materials conveyed on to stockpile and the larger materials conveyed on to a jaw crusher for crushing. From the jaw crusher, materials are conveyed to a second screen, with the oversized materials conveyed to an impact crusher and the undersized materials conveyed on to a third screen. Undersized materials are either conveyed to a product pile or on to a sand auger washer, for washing prior to transfer to stockpile.
- 3. *Objectives of Project*: Riverside, in an effort to increase business and revenue for the company, submitted a complete permit application for the crushing/screening plant. The issuance of Permit #3240-00 would allow Riverside to operate the crushing/screening equipment at various locations throughout Montana, including the initial site location.
- 4. *Alternatives Considered*: In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Riverside demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

- 5. *A Listing of Mitigation, Stipulations, and Other Controls*: A listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in Permit #3240-00.
- 6. Regulatory Effects on Private Property Rights: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and would not unduly restrict private property rights.

7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no action alternative" was discussed previously.

		Major	Moderate	Minor	None	Unknow n	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			X			yes
B.	Water Quality, Quantity, and Distribution			X			yes
C.	Geology and Soil Quality, Stability, and Moisture			X			yes
D.	Vegetation Cover, Quantity, and Quality			X			yes
E.	Aesthetics			X			yes
F.	Air Quality			X			yes
G.	Unique Endangered, Fragile, or Limited Environmental Resource			X			yes
Н.	Demands on Environmental Resource of Water, Air, and Energy			X			yes
I	Historical and Archaeological Sites	_	_		X	_	yes
J.	Cumulative and Secondary Impacts	_		X		_	yes

Summary of Comments on Potential Physical and Biological Effects: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the crushing/screening operations. The crushing/screening operations would be small, with intermittent and seasonal operations, so only minor effects on terrestrial life would be expected as a result of equipment operations or from pollutant deposition.

Impacts on aquatic life could result from water runoff and pollutant deposition, but such impacts would be minor as the facility is a small source, with seasonal and intermittent operations. Since good dispersion of air pollutants would occur in the proposed areas of operation and only a minor amount of air emissions would be generated, only minor deposition would occur. At the initial site location, the nearest surface water (the Columbus Water Users Association Ditch and marshland) is approximately 0.2 miles away. Therefore, because the small amount of air emissions generated would correspond to an equally small amount of pollutant deposition to local waterways and because the nearest water is 0.2 miles away, the impacts to aquatic life and habitat would be minor.

B. Water Quality, Quantity, and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, water use would only cause a minor disturbance to the area since only relatively small amounts of water would be needed.

As described in Section 7.F of this EA, the maximum impacts from the air emissions from this facility would be relatively minor. As a result of low air impacts from this facility, the corresponding deposition of the air pollutants in the area would also be very minor. Additionally, the operations would be intermittent and seasonal in nature. Thus, the small and intermittent amounts of deposition from the crushing/screening operations would only have minor impacts upon water quality.

C. Geology and Soil Quality, Stability, and Moisture

The soils in the proposed site locations would be impacted by the crushing/screening operations due to the construction and use of the crushing/screening facility. Considering the facilities relatively small size (a minor source of emissions by industrial standards), temporary (portable) nature, and site location (operations would take place within a previously disturbed mine site and in an area where good pollution dispersion would occur), the corresponding deposition of the air pollutants in the area would also be minor.

D. Vegetation Cover, Quantity, and Quality

The existing vegetation cover would be impacted by the emissions from the crushing/screening facility. Surrounding vegetative cover would generally include alfalfa, barley, western wheat grass, orchard grass, smooth brome, and annual forbs. However, given that the operations are relatively small size and temporary in nature, any impacts on vegetation would be minor.

As described in Section 7.F of this EA, the impacts of air emissions from this facility are minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, because the water usage is minimal, as described in 7.B, and the associated soil disturbance is minimal, as described in 7.C, corresponding vegetative impacts would also be minimal.

E. Aesthetics

The crushing/screening operations would be visible and would create additional noise in the area. Permit #3240-00 would include conditions to control emissions, including visible emissions, from the plant. Since the crushing/screening operations are small and portable with seasonal and intermittent operations and would generally be located within existing pits, any visual and noise impacts would be minor.

F. Air Quality

The air quality impacts from the crushing/screening operations would be minor because Permit #3240-00 would include conditions limiting the opacity from the plant, as well as requiring water spray bars and other means to control air pollution. Additionally, the facility is considered a minor source of air pollution by industrial standards and would be located in an area where good dispersion will occur. Also, the size and location of the facility would result in minimal air quality impacts.

The operations would be limited, by Permit #3240-00, to total emissions of 250 tons/year or less of any regulated pollutant, from non-fugitive sources at the plant, in addition to any additional equipment at the site. In addition, the emissions from this facility would be subject to BACT. For example, the plant would be required to use water spray to reduce emissions from equipment operations, storage piles, and haul roads. Furthermore, the operation would have temporary and intermittent use, thereby further reducing potential air quality impacts from the facility. Air quality impacts would be minimal.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the initial proposed area of operation, contacted the Montana Natural Heritage Program (MNHP). Search results concluded there are no such environmental resource found within the defined area. The defined area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer.

However, according to the Bald Eagle Management Plan, the home range of the Bald eagle has a radius of 2.5 miles. Therefore the Department attempted to address bird rookeries within this range. The closest Bald Eagle bird rookery is more than 2.5 miles away from the defined area of operations, so this species would not be affected by the proposed project. However, there is a Blue Heron Bird rookery approximately 2 miles away from the proposed project site. This rookery is located on an intermittent island (an area that is sometimes under water during the nesting season). Thus, this site will not serve as a permanent location for this species of concern. These proposed crushing/screening operations would also be intermittent. Therefore, the proposed operations would have, at most, minor and temporary affects upon the blue heron bird rookery.

H. Demands on Environmental Resources of Water, Air, and Energy

Due to the size of the facility, the crushing/screening operations would only require small quantities of water, air, and energy for proper operation. Small quantities of water would be used for dust suppression and would control emissions being generated at the site. Energy requirements would also be small because the facility is a small crushing/screening operation and would be electrically powered. In addition, a small diesel engine would be used to power the water pump. Air resources and subsequent impacts would also be minor because the source is small by industrial standards with intermittent and seasonal operations, and because air pollutants would be widely dispersed. Therefore, any impacts upon water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. Search results have concluded that there are no previously recorded historical or archaeological resources of concern within the area. According to correspondence from the Montana State Historic Preservation Office, given the previous disturbance in the area, there would be a low likelihood of adverse disturbance to any known archaeological or historic site.

J. Cumulative and Secondary Impacts

The crushing/screening operations would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generally have only seasonal and intermittent use, and because the facility is considered a minor source of air pollutants by industrial standards. The facility would generate emissions of particulate matter

(PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM $_{10}$), oxides of nitrogen (NO $_x$), volatile organic compounds (VOC), carbon monoxide (CO), and oxides of sulfur (SO $_x$). Noise would also be generated from the site, but would cause minimal disturbance because the sites are generally existing pits. Additionally, this facility, in combination with the other emissions from the site would not be allowed to exceed 250 tons per year of non-fugitive emissions.

8. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no action alternative" was discussed previously.

		Major	Moderate	Minor	None	Unknow n	Comments Included
A.	Social Structures and Mores				X		yes
B.	Cultural Uniqueness and Diversity				X		yes
C.	Local and State Tax Base and Tax Revenue			X			yes
D	Agricultural or Industrial Production			X			yes
E.	Human Health			X			yes
F.	Access to and Quality of Recreational and Wilderness Activities			X			yes
G	Quantity and Distribution of Employment			X			yes
H.	Distribution of Population				X		yes
I.	Demands for Government Services			X			yes
J.	Industrial and Commercial Activity			X			yes
K.	Locally Adopted Environmental Plans and Goals				X		yes
L.	Cumulative and Secondary Impacts			X			yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The Department has prepared the following comments.

A. Social Structures and Mores

The crushing/screening operation would cause no disruption to the social structures and mores in the area because the source is relatively small in size and temporary in nature. Additionally, the equipment would generally be located in previously developed pits that have been designated and used for such purposes, would be located in an area hidden (removed) from the general population, would be a minor source of air pollution, and would be required to operate under the conditions in Permit #3240-00 (including production limitations). Thus, no native or traditional communities would be affected by the proposed project operations and no impacts upon social structures or mores to any surrounding communities would result.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of the area would not be impacted by the proposed crushing/screening operations because the site and surrounding area have already been designated and used for such purposes and are separated from the general population. Additionally, the facility would be considered a portable/temporary source with seasonal and intermittent operations. The facility would also be required to operate in such a manner as to minimize impacts on the human environment. Thus, no impacts to the cultural uniqueness and diversity to the area would result.

C. Local and State Tax Base and Tax Revenue

The crushing/screening operations would have little, if any, effect on the local and state tax base and tax revenue because the facility would be a temporary source and small by industrial standards. The facility operations would only require the use of 2 employees. Thus, only minor impacts to the local and state tax base and revenue could be expected from the employees. Furthermore, the impacts to local tax bases and revenue is expected to be minor because the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The crushing/screening operations would locate in a previously disturbed industrial area and are small by industrial standards (having only a minor impact on local industrial production). There would be temporary, but minor effects to agricultural land because the facility would be operating in an area that has been previously used for agricultural production. However, the facility operations are small and temporary in nature and would be conducted in such a manner as to minimize such impacts. Pollution control would be utilized on equipment operations and production limits would be established to protect the surrounding environment, including local agricultural production. Therefore, any associated impacts to agricultural production would also be minor.

E. Human Health

Permit #3240-00 would incorporate conditions to ensure that the crushing/screening facility would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in 7.F., the air emissions from this facility would be minimized by the use of water spray and other emission limits established in Permit #3240-00. Therefore, only minor impacts would be expected upon human health from this crushing/screening facility.

F. Access to and Quality of Recreational and Wilderness Activities

The crushing/screening operations would not affect access to recreational and wilderness activities in the area because the area surrounding the operational site is generally not recreational or wilderness property. Thus, no changes to recreational and wilderness activities, or access to those activities, are expected from operations of the crushing/screening facility. Additionally, noise from the facility would be minimal because the facility would operate within the confines of an open cut pit. Also, the facility would be a small and temporary source. Thus, any changes in the quality of recreational and wilderness activities from noise, created by operating the equipment at the site, would be minor and intermittent.

G. Quantity and Distribution of Employment

The crushing/screening operation is a small and temporary source, which would only have minor affects to quality and distribution of employment in the area because Riverside would use 2 existing employees for the project.

H. Distribution of Population

The crushing/screening operation is small. Additionally, no new employees are expected to be used for the operation of the facility, because the facility is small and seasonal. Thus, no new employees are expected to be utilized and no individuals would move to the area as a result of operating the crushing/screening facility. Therefore, the crushing/screening operations would not disrupt the normal population distribution in the area.

I. Demands of Government Services

Minor increases would be seen on traffic on existing roadways in the area while the crushing/screening operations are in progress. In addition, government services would be required for acquiring the appropriate permits from government agencies. Demands for government services would be minor.

J. Industrial and Commercial Activity

The crushing/screening operations would represent only a minor increase in the industrial activity in the given area because of the small size of the operations and the portable and temporary nature of the facility. No additional industrial or commercial activity is expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals that would be affected by the proposed project. The state standards would protect the proposed site and the environment surrounding the site.

L. Cumulative and Secondary Impacts

The crushing/screening operations would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area because the source is a portable, temporary source. Minor increases in traffic would have minor effects on local traffic in the immediate area, thus, having a direct effect on the social environment. Because the source is relatively small and temporary in nature, only minor economic impacts to the local economy could be expected from the operation of the facility. Thus, minor cumulative effects would also result to the local economy.

Recommendation: An EIS is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor, therefore, an EIS is not required.

Other groups or agencies contacted or which may have overlapping jurisdiction: Department of Environmental Quality - Permitting and Compliance Division (Air and Waste Management Bureau and Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and State Historic Preservation Office (Montana Historical Society).

Individuals or groups contributing to this EA: Department of Environmental Quality (Air and Waste Management Bureau and Industrial and Energy Minerals Bureau), Montana Natural Heritage Program, and State Historic Preservation Office (Montana Historical Society).

EA prepared by: Ron Lowney Date: February 20, 2002